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OM protein - protein search, using sw model
Run On: November 30, 2002, 12:35:03 ; Search time 11.5 Seconds
(without alignments)
(1286.933 Million cell updates/sec)

Title: US-10-025-514-8
Perfect score: 2675

Sequence: 1 MSGKSFKAGVCPKKSAQCL.....IEQNTKSPFLFMGKVNPQTQK 503

Scoring table: Blosum62
Gapop 10.0 , Gapext 0.5

Searched: 262574 seqs, 29422922 residues

Total number of hits satisfying chosen parameters: 262574

Minimum DB seq length: 0
Maximum DB seq length: 2000000000

Post-processing: Minimum Match 0%
Maximum Match 100%

Listing first 45 summaries

Database :

Issued_Patents_AA:
1: /cgns2_6/pctodata/1/iaa/5A_COMB.pep:
2: /cgns2_6/pctodata/1/iaa/5B_COMB.pep:
3: /cgns2_6/pctodata/1/iaa/6A_COMB.pep:
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5: /cgns2_6/pctodata/1/iaa/PCTUS_COMB.pep:
6: /cgns2_6/pctodata/1/iaa/backfiles1.pep:
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Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

Result No.	Score	Query	Match	Length	DB	ID	Description
1	2052.5	76.7	418	1	US-08-121-714-3		Sequence 3, Appli
2	2052.5	76.7	418	1	US-08-477-108A-3		Sequence 3, Appli
3	2052.5	76.7	418	2	US-08-477-112-3		Sequence 3, Appli
4	2052.5	76.7	418	5	PCT-US93-08322-3		Sequence 3, Appli
5	2030	75.9	394	3	US-09-023-339-1		Sequence 1, Appli
6	2024	75.7	394	1	US-08-002-202-6		Sequence 6, Appli
7	2019	75.5	394	2	US-08-553-488A-1		Sequence 6, Appli
8	2018	75.4	394	1	US-08-002-202-11		Sequence 1, Appli
9	2014	75.3	394	3	US-08-481-534-6		Sequence 11, Appli
10	2013	75.3	394	1	US-08-002-202-9		Sequence 6, Appli
11	2010.5	75.2	414	1	US-08-002-202-17		Sequence 9, Appli
12	2010.5	75.2	414	3	US-08-481-534-17		Sequence 17, Appli
13	2008	75.1	394	3	US-08-481-534-11		Sequence 17, Appli
14	2004.5	74.9	414	1	US-08-002-202-13		Sequence 11, Appli
15	2004.5	74.9	414	3	US-08-481-534-13		Sequence 13, Appli
16	2003	74.9	394	3	US-08-481-534-9		Sequence 9, Appli
17	1999.5	74.7	414	1	US-08-002-202-19		Sequence 19, Appli
18	1999.5	74.7	414	3	US-08-481-534-19		Sequence 19, Appli
19	1392	52.0	308	1	US-07-859-480-2		Sequence 2, Appli
20	820	30.7	405	1	US-07-829-954-2		Sequence 2, Appli
21	820	30.7	405	1	US-07-994-423-2		Sequence 2, Appli
22	820	30.7	405	1	US-08-421-891-2		Sequence 2, Appli
23	635	23.7	107	2	US-07-963-538B-4		Sequence 4, Appli
24	635	23.7	132	1	US-08-304-051-21		Sequence 4, Appli
25	635	23.7	132	5	PCT-US95-11445-21		Sequence 21, Appli
26	587	21.9	107	3	US-08-483-503A-4		Sequence 4, Appli
27	545.5	20.4	444	4	US-08-271-608-8		Sequence 8, Appli

ALIGNMENTS

RESULT 1	US-08-121-714-3	Sequence 3, Application US/08121714
		; Patent No. 5470970
		; GENERAL INFORMATION:
		; APPLICANT: Sager, Ruth
		; TITLE OF INVENTION: MASPIN, A NOVEL SERPIN WITH TUMOR SUPPRESSING ACTIVITY
		; NUMBER OF SEQUENCES: 8
		; CORRESPONDENCE ADDRESS:
		; ADDRESSEE: Fish & Richardson
		; STREET: 225 Franklin Street
		; CITY: Boston
		; STATE: Massachusetts
		; COUNTRY: U.S.A.
		; ZIP: 02110-2804
		; COMPUTER READABLE FORM:
		; MEDIUM TYPE: 3.5" Diskette, 1.44 Mb
		; COMPUTER IBM PS/2 Model 50Z or 55SX
		; OPERATING SYSTEM: MS-DOS (Version 5.0)
		; SOFTWARE: WordPerfect (Version 5.1)
		; CURRENT APPLICATION DATA:
		; APPLICATION NUMBER: US/08/121-714
		; FILING DATE: 09/01/92
		; CLASSIFICATION: 53,6
		; PRIOR APPLICATION DATA:
		; APPLICATION NUMBER: 07/938,823
		; FILING DATE: 09/01/92
		; APPLICATION NUMBER: 07/844,296
		; FILING DATE: 02/28/92
		; APPLICATION NUMBER: 07/662,216
		; FILING DATE: 02/28/91
		; ATTORNEY/AGENT INFORMATION:
		; NAME: Fraser, Janis K.
		; REGISTRATION NUMBER: 34,819
		; REFERENCE/DOCKET NUMBER: 00530/072001
		; SEQUENCE CHARACTERISTICS:
		; LENGTH: 418
		; TELECOMMUNICATION INFORMATION:
		; TYPE: amino acid
		; STRANDEDNESS:
		; TOPOLOGY: linear
		; TELEX: (617) 542-5070
		; TELEFAX: (617) 542-8906
		; TELEX: 200154
		; INFORMATION FOR SEQ ID NO: 3:
		; SEQUENCE CHARACTERISTICS:
		; LENGTH: 418
		; TYPE: amino acid
		; STRANDEDNESS:
		; TOPOLOGY: linear
		; TELEX: 08-121-714-3
		; Score 2052.5; Pred. No. 2.7e-167; Length 418;
		Query Match Best Local Similarity 76.7%;
		Best Local Similarity 97.8%; Pred. No. 2.7e-167;

APPLICATION NUMBER: 07/844,296
 FILING DATE: 02/28/92
 APPLICATION NUMBER: 07/662,216
 FILING DATE: 02/28/91
 ATTORNEY/AGENT INFORMATION:
 NAME: Fraser, Janis K.
 REGISTRATION NUMBER: 34,819
 REFERENCE/DOCKET NUMBER: 06570/002003
 TELECOMMUNICATION INFORMATION:
 TELEPHONE: (617) 542-5070
 TELEX: (617) 542-8906
 INFORMATION FOR SEQ ID NO: 3:
 SEQUENCE CHARACTERISTICS:
 LENGTH: 418
 TYPE: amino acid
 STRANDEDNESS:
 TOPOLOGY: linear
 US-08-477-112-3

Query Match 76.7% Score 2052.5; DB 2; Length 418;
 Best Local Similarity 97.8%; Pred. No. 2.7e-167;
 Matches 399; Conservative 2; Mismatches 4; Indels 3; Gaps 1;

Qy 96 GMCGKSCVSPYKAMEDPQDQAQKTDTSHHDQHPTNKRITPNLAEEAFSFLYROLAHQSN 155
 Db 14 GLC---CLVPVSIAEDPQDQAQKTDTSHHDQHPTNKRITPNLAEEAFSFLYROLAHQSN 70
 Qy 156 STNIFPSVSIATAFAMSLGKTADEAKTDBILEGLNFNLTIEPAQHGEFQELLTLNQP 215
 Db 71 STNIFPSVSIATAFAMSLGTRADTHBTEILEGLNFNLTIEPAQHGEFQELLTLNQP 130
 Qy 216 DSQQLQTNTGLFSEGJRLVKDFLEDYKKLYHSEAFTVNGDTEFAKQINDYVEKGQ 275
 Db 131 DSQQLQTNTGLESEGJKLVKDFLEDYKKLYHSEAFTVNGDTEFAKQINDYVEKGQ 190
 Qy 276 GKIVDLVKELDRTDVVALVNIFYFGKWERPEVKOTEEDFHQDQVTYKVPMKRGW 335
 Db 191 GKIVDLVKELDRTDVVALVNIFYFGKWERPEVKOTEEDFHQDQVTYKVPMKRGW 250
 Qy 336 FNTQHKCKLSSWVLLMKYLGNTAAIFLPDEGKQKHLNELETHDITKFLENEDRRSASL 395
 Db 251 FNTQHKCKLSSWVLLMKYLGNTAAIFLPDEGKQKHLNELETHDITKFLENEDRRSASL 310
 Qy 396 HPLKLSTGTYDLSVQLGLGTIKVFSNGAQLSGVTEAPKLKSAVHVAVLTIDEKGT 455
 Db 311 HPLKLSTGTYDLSVQLGLGTIKVFSNGAQLSGVTEAPKLKSAVHVAVLTIDEKGT 370
 Qy 456 AAGAMELEAPMSIPPEVKENPKPFVLMIBONTKSPLFMGVNVPTQ 503
 Db 371 AAGAMELEAPMSIPPEVKENPKPFVLMIBONTKSPLFMGVNVPTQ 418

RESULT 4 PCT-US90-08322-3
 Sequence 3, Application PC/TUS9308322
 GENERAL INFORMATION:
 APPLICANT: Sager, Ruth
 TITLE OF INVENTION: MASPIN, A NOVEL SERPIN WITH TUMOR SUPPRESSING ACTIVITY
 NUMBER OF SEQUENCES: 8
 CORRESPONDENCE ADDRESS:
 ADDRESSEE: Elsh & Richardson
 STREET: 225 Franklin Street
 CITY: Boston
 STATE: Massachusetts
 COUNTRY: U.S.A.
 ZIP: 02110-2604
 COMPUTER READABLE FORM:
 MEDIUM TYPE: 3.5" Diskette, 1.44 Mb
 COMPUTER: IBM PS/2 Model 50Z or 555X
 OPERATING SYSTEM: MS-DOS (Version 5.0)
 SOFTWARE: WordPerfect (Version 5.1)
 CURRENT APPLICATION DATA:

APPLICATION NUMBER: PCT/US93/08322
 FILING DATE:
 CLASSIFICATION:
 PRIOR APPLICATION DATA:
 APPLICATION NUMBER: 07/938,823
 FILING DATE: 09/01/92
 APPLICATION NUMBER: 07/844,296
 FILING DATE: 02/28/92
 APPLICATION NUMBER: 07/662,216
 FILING DATE: 02/28/91
 ATTORNEY/AGENT INFORMATION:
 NAME: Fraser, Janis K.
 REGISTRATION NUMBER: 34,819
 REFERENCE/DOCKET NUMBER: 00530/072001
 TELECOMMUNICATION INFORMATION:
 TELEPHONE: (617) 542-5070
 TELEX: (617) 542-8906
 INFORMATION FOR SEQ ID NO: 3:
 SEQUENCE CHARACTERISTICS:
 LENGTH: 418
 TYPE: amino acid
 STRANDEDNESS:
 TOPOLOGY: linear
 PCT-US93-08322-3

Query Match 76.7% Score 2052.5; DB 5; Length 418;
 Best Local Similarity 97.8%; Pred. No. 2.7e-167;
 Matches 399; Conservative 2; Mismatches 4; Indels 3; Gaps 1;

Qy 96 GMGKSCVSPYKAMEDPQDQAQKTDTSHHDQHPTNKRITPNLAEEAFSFLYROLAHQSN 155
 Db 14 GLC---CLVPVSIAEDPQDQAQKTDTSHHDQHPTNKRITPNLAEEAFSFLYROLAHQSN 70
 Qy 156 STNIFPSVSIATAFAMSLGKTADEAKTDBILEGLNFNLTIEPAQHGEFQELLTLNQP 215
 Db 71 STNIFPSVSIATAFAMSLGTRADTHBTEILEGLNFNLTIEPAQHGEFQELLTLNQP 130
 Qy 216 DSQQLQTNTGLFSEGJRLVKDFLEDYKKLYHSEAFTVNGDTEFAKQINDYVEKGQ 275
 Db 131 DSQQLQTNTGLESEGJKLVKDFLEDYKKLYHSEAFTVNGDTEFAKQINDYVEKGQ 190
 Qy 276 GKIVDLVKELDRTDVVALVNIFYFGKWERPEVKOTEEDFHQDQVTYKVPMKRGW 335
 Db 191 GKIVDLVKELDRTDVVALVNIFYFGKWERPEVKOTEEDFHQDQVTYKVPMKRGW 250
 Qy 336 FNTQHKCKLSSWVLLMKYLGNTAAIFLPDEGKQKHLNELETHDITKFLENEDRRSASL 395
 Db 251 FNTQHKCKLSSWVLLMKYLGNTAAIFLPDEGKQKHLNELETHDITKFLENEDRRSASL 310
 Qy 396 HPLKLSTGTYDLSVQLGLGTIKVFSNGAQLSGVTEAPKLKSAVHVAVLTIDEKGT 455
 Db 311 HPLKLSTGTYDLSVQLGLGTIKVFSNGAQLSGVTEAPKLKSAVHVAVLTIDEKGT 370
 Qy 456 AAGAMELEAPMSIPPEVKENPKPFVLMIBONTKSPLFMGVNVPTQ 503
 Db 371 AAGAMELEAPMSIPPEVKENPKPFVLMIBONTKSPLFMGVNVPTQ 418

RESULT 5 US-09-023-339-1
 Sequence 1, Application US/0902339
 Patent No. 6,127,145
 GENERAL INFORMATION:
 APPLICANT: Sutliff, Thomas D.
 APPLICANT: Rodriguez, Raymond L.
 TITLE OF INVENTION: Production of '1-Antitrypsin
 In Plants
 NUMBER OF SEQUENCES: 22
 CORRESPONDENCE ADDRESS:
 ADDRESSEE: Dehlinger & Associates
 STREET: P.O. Box 60850
 CITY: Palo Alto

APPLICANT: YU, Myeong-Hee
 ADDRESS: 3-1003, Hankang Apartment, 49-8, Jamwon-dong,
 CITY: Seoul
 STATE: Republic of Korea
 ZIP: 137-030
 ADDRESS: KWON, Ki-Sun
 STREET: 110-1306, Hanbit Apartment, Oun-dong,
 CITY: Seocho-gu
 STATE: Republic of Korea
 ZIP: 305-133
 ADDRESS: LEE, Kee-Nyung
 STREET: 105-1004, Hanbit Apartment, Oun-dong,
 CITY: Yuseong-gu
 STATE: Taejon
 COUNTRY: Republic of Korea
 ZIP: 305-333
 ADDRESS: SHIN, Hwa-Soo
 STREET: 3-303, Sindonga Apartment, Yongjeon-dong,
 CITY: Taejon
 STATE: Taejon
 COUNTRY: Republic of Korea
 ZIP: 300-200
 COMPUTER READABLE FORM:
 MEDIUM TYPE: Diskette, 3.5inch, 1.44MB storage
 COMPUTER: IBM PC/AT
 OPERATING SYSTEM: MS-DOS
 SOFTWARE: Word Perfect 5.1
 CURRENT APPLICATION DATA:
 APPLICATION NUMBER: US-08/553,488A
 FILING DATE: 20-NOV-1995
 CLASSIFICATION: 435
 PRIOR APPLICATION DATA:
 APPLICATION NUMBER: KR 93-8510
 FILING DATE: 18-MAY-1993
 ATTORNEY/AGENT INFORMATION:
 NAME:
 REGISTRATION NUMBER:
 REFERENCE/DOCKET NUMBER:
 TELECOMMUNICATION INFORMATION:
 TELEPHONE:
 TELEFAX:
 INFORMATION FOR SEQ ID NO: 1:
 SEQUENCE CHARACTERISTICS:
 LENGTH: 394 amino acids
 TYPE: amino acid
 TOPOLOGY: linear
 MOLECULE TYPE: protein
 FEATURE:
 OTHER INFORMATION: wild type human '-1-antitrypsin
 US-08-553-488A-1

Qy 170 FAMLSLGTRKADTHDEILEGLNPNLTLPEAQTHEGGQELLRTLNOPDSQLQLTGNGLPL 229
 Db 61 FAMLSVGTRKADTHDEILEGLNPNLTLPEAQIHEGFQELLHTLNOPDSQLQLTGNGLPL 120
 Qy 230 SEGILYDVKFLVEDVKLYHSEAFYTFVNFGDTBEAKQINDYVEKGTOGKIVDLYKELDRT 289
 Db 121 SEGILYDVKFLVEDVKLYHSEAFYTFVNFGDTBEAKQINDYVEKGTOGKIVDLYKELDRT 180
 Qy 290 VFAALVNTFFKCKWPERFEVDTEEDFHIDQVTTVKVPMKRGMFNQHKCKLSSWVL 349
 Db 181 VFAALVNTFFKCKWPERFEVDTEEDFHIDQVTTVKVPMKRGMFNQHKCKLSSWVL 240
 Qy 350 LMKGIGNATAIFFLPDKQHLNENLTDTKLENEDRRSASLHLPLSLTGTYDLK 409
 Db 241 LMKGIGNATAIFFLPDKQHLNENLTDTKLENEDRRSASLHLPLSLTGTVLK 300
 Qy 410 SVLGQLGITKVPSNGADLSGYTEAFLKLSKAVKVLTIDEKTEAGMFLAEAPMSI 469
 Db 301 SVLGQLGITKVPSNGADLSGYTEAFLKLSKAVKVLTIDEKTEAGMFLAEAPMSI 360
 Qy 470 PPEVKENKPKFVLMIQNTSPLEKQGVNPQTQ 503
 Db 361 PPEVKENKPKFVLMIQNTSPLEKQGVNPQTQ 394

RESULT 8
 US-08-002-202-11
 Sequence 1.1, Application US/08002202
 Patent No. 5604201
 GENERAL INFORMATION:
 APPLICANT: Thomas, Garry D
 APPLICANT: Anderson, Eric D
 APPLICANT: Thomas, Laurel S
 APPLICANT: Haylick, Joel S
 APPLICANT: Furin Endoprotease
 ADDRESSSEE: Allegretti and Witcoff, Ltd.
 STREET: 110 South Wacker Drive, Suite 3000
 CITY: Chicago
 STATE: Illinois
 COUNTRY: USA
 ZIP: 60606
 COMPUTER READABLE FORM:
 MEDIUM TYPE: Floppy disk
 COMPUTER: IBM PC compatible
 OPERATING SYSTEM: PC-DOS/MS-DOS
 SOFTWARE: PatentIn Release #1.0, Version #1.25
 CURRENT APPLICATION DATA:
 APPLICATION NUMBER: US/08/002,202
 FILING DATE: 08-JAN-1993
 CLASSIFICATION: 514
 ATTORNEY/AGENT INFORMATION:
 NAME: Kevin E
 REGISTRATION NUMBER: 35,3003
 REFERENCE/DOCKET NUMBER: 92,448
 TELECOMMUNICATION INFORMATION:
 TELEPHONE: 312-715-1000
 TELEX: 312-715-1234
 TELEX: 910-221-5317
 INFORMATION FOR SEQ ID NO: 11:
 SEQUENCE CHARACTERISTICS:
 LENGTH: 394 amino acids
 TYPE: amino acid
 TOPOLOGY: linear
 MOLECULE TYPE: protein
 FEATURE:
 NAME/KEY: Protein
 LOCATION: 1..394
 OTHER INFORMATION: /label= Variants
 /note= "This amino acid sequence is the amino acid sequence of the modified alpha-1-antitrypsin
 OTHER INFORMATION:

Qy 110 EDPGDAAKTDTSHDDHPTMKITPNAEFAFSLYRQAHQSNTNIFSPVSIATA 169
 Db 1 EDPGDAAKTDTSHDDHPTMKITPNAEFAFSLYRQAHQSNTNIFSPVSIATA 60

OTHER INFORMATION: variant, alpha-1-antitrypsin Pittsburgh "us-08-002-202-11"

Query Match 75.4%; Score 2018; DB 1; Length 394;
Best Local Similarity 99.2%; Pred. No. 2.2e-164;
Matches 391; Conservative 2; Mismatches 1; Indels 0; Gaps 0;

QY 110 EDPGQDAQKTDTSHHDDQHPTFNKITPNAEAFSLYRQLAHOSNSNIFSPVSIATA 169
DB 1 EDPGQDAQKTDTSHHDDQHPTFNKITPNAEAFSLYRQLAHOSNSNIFSPVSIATA 60
QY 170 FAMLSLGTKADTHDELEGFLNIFNTIPEAQIHEGFOELRLTNQPSDQLQTGNGLFL 229
DB 61 FAMLSLGTKADTHDELEGFLNIFNTIPEAQIHEGFOELRLTNQPSDQLQTGNGLFL 120
QY 230 SFGKLKVDFKFLFEDVKLYHSAAFTYNSFGDTEAKQINDYVEKGTKIVDVKELDRD 289
DB 121 SFGKLKVDFKFLFEDVKLYHSAAFTYNSFGDTEAKQINDYVEKGTKIVDVKELDRD 180
QY 290 VPAVLNVIFFKGKWERPFEYDHDQVTTVYKPMKRLGMENIQHCKKLSSWVL 349
DB 181 VPAVLNVIFFKGKWERPFEYDHDQVTTVYKPMKRLGMENIQHCKKLSSWVL 240
QY 350 LAKYLNATAIIFLPDEGKQGHLENELTHDLITKFLENEDRSASHLPKLSITGTYDLK 409
DB 241 LAKYLNATAIIFLPDEGKQGHLENELTHDLITKFLENEDRSASHLPKLSITGTYDLK 300
QY 410 SVLGQLGITKVSNGADLSGTYEAPLKLSAVKAVALTIDEKGTEAAGMFLAIPMSI 469
DB 301 SVLGQLGITKVSNGADLSGTYEAPLKLSAVKAVALTIDEKGTEAAGMFLAIPMSI 360
QY 470 PPEVKFNKPFPVFLMIEONTKSPLFMRGVNPQTQ 503
DB 361 PPEVKFNKPFPVFLMIEONTKSPLFMRGVNPQTQ 394

RESULT 9

; Sequence 6, Application US/08481534
; Patent No. 6022655

GENERAL INFORMATION:

; APPLICANT: Thomas, Gary

; APPLICANT: Anderson, Eric D

; APPLICANT: Thomas, Laurel

; APPLICANT: Haylick, Joel S

; APPLICANT: Nelson, Jay

; APPLICANT: Stenglein, Stephan G

; TITLE OF INVENTION: Methods and Reagents for Inhibiting Furin

; TITLE OF INVENTION: Endoprotease

; NUMBER OF SEQUENCES: 21

; CORRESPONDENCE ADDRESS:

; ADDRESSEE: McDonnell Boehnen Hulbert & Berghoff

; STREET: 300 South Wacker Drive

; CITY: Chicago

; STATE: IL

; COUNTRY: USA

; ZIP: 60606

; COMPUTER READABLE FORM:

; MEDIUM TYPE: Floppy disk

; COMPUTER: IBM PC compatible

; OPERATING SYSTEM: PC-DOS/MS-DOS

; SOFTWARE: PatentIn Release #1.0, Version #1.25

; CURRENT APPLICATION DATA:

; APPLICATION NUMBER: US/08/481,534

; FILING DATE: 14-SEP-1995

; CLASSIFICATION: 530

; ATTORNEY/AGENT INFORMATION:

; NAME: No. 6022855nan, Kevin E

; REGISTRATION NUMBER: 35,303

; REFERENCE/DOCKET NUMBER: 92,448 D

; TELECOMMUNICATION INFORMATION:

; TELEPHONE: 312-913-0001

; TELEX: 312-913-0001

; ; TELELEX: ; INFORMATION FOR SEQ ID NO: 6:
; ; SEQUENCE CHARACTERISTICS:
; ; LENGTH: 394 amino acids
; ; TYPE: amino acid
; ; TOPOLOGY: linear
; ; MOLECULE TYPE: protein
; ; US-08-481-534-6

Query Match 75.3%; Score 2014; DB 3; Length 394;
Best Local Similarity 99.0%; Pred. No. 4.8e-164;
Matches 390; Conservative 3; Mismatches 1; Indels 0; Gaps 0;

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Qy 170 FAMLSLGTKADTHDELEGFLNIFNTIPEAQIHEGFOELRLTNQPSDQLQTGNGLFL 229
Db 61 FAMLSLGTKADTHDELEGFLNIFNTIPEAQIHEGFOELRLTNQPSDQLQTGNGLFL 120
Qy 230 SFGKLKVDFKFLFEDVKLYHSAAFTYNSFGDTEAKQINDYVEKGTKIVDVKELDRD 289
Db 121 SFGKLKVDFKFLFEDVKLYHSAAFTYNSFGDTEAKQINDYVEKGTKIVDVKELDRD 180
Qy 290 VPAVLNVIFFKGKWERPFEYDHDQVTTVYKPMKRLGMENIQHCKKLSSWVL 349
Db 181 VPAVLNVIFFKGKWERPFEYDHDQVTTVYKPMKRLGMENIQHCKKLSSWVL 240
Qy 350 LAKYLNATAIIFLPDEGKQGHLENELTHDLITKFLENEDRSASHLPKLSITGTYDLK 409
Db 241 LAKYLNATAIIFLPDEGKQGHLENELTHDLITKFLENEDRSASHLPKLSITGTYDLK 300
Qy 410 SVLGQLGITKVSNGADLSGTYEAPLKLSAVKAVALTIDEKGTEAAGMFLAIPMSI 469
Db 301 SVLGQLGITKVSNGADLSGTYEAPLKLSAVKAVALTIDEKGTEAAGMFLAIPMSI 360
Qy 470 PPEVKFNKPFPVFLMIEONTKSPLFMRGVNPQTQ 503
Db 361 PPEVKFNKPFPVFLMIEONTKSPLFMRGVNPQTQ 394

RESULT 9

; Sequence 6, Application US/08481534
; Patent No. 6022655

GENERAL INFORMATION:

APPLICANT: Thomas, Gary
APPLICANT: Anderson, Eric D
APPLICANT: Thomas, Laurel
APPLICANT: Haylick, Joel S
APPLICANT: Nelson, Jay
APPLICANT: Stenglein, Stephan G
TITLE OF INVENTION: Methods and Reagents for Inhibiting Furin
TITLE OF INVENTION: Endoprotease
NUMBER OF SEQUENCES: 21
CORRESPONDENCE ADDRESS:
ADDRESSEE: McDonnell Boehnen Hulbert & Berghoff
STREET: 300 South Wacker Drive
CITY: Chicago
STATE: IL
COUNTRY: USA
ZIP: 60606

COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: PatentIn Release #1.0, Version #1.25

CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/481,534
FILING DATE: 14-SEP-1995
CLASSIFICATION: 530
ATTORNEY/AGENT INFORMATION:
NAME: No. 6022855nan, Kevin E
REGISTRATION NUMBER: 35,303
REFERENCE/DOCKET NUMBER: 92,448 D
TELECOMMUNICATION INFORMATION:
TELEPHONE: 312-913-0001

TELEX: 312-913-0001

SEQUENCE 6, Application US/08481534
Patent No. 6022655

GENERAL INFORMATION:
APPLICANT: Thomas, Gary
APPLICANT: Anderson, Eric D
APPLICANT: Thomas, Laurel
APPLICANT: Haylick, Joel S
APPLICANT: Nelson, Jay
APPLICANT: Stenglein, Stephan G
TITLE OF INVENTION: Methods and Reagents for Inhibiting Furin
TITLE OF INVENTION: Endoprotease
NUMBER OF SEQUENCES: 21
CORRESPONDENCE ADDRESS:
ADDRESSEE: McDonnell Boehnen Hulbert & Berghoff
STREET: 300 South Wacker Drive
CITY: Chicago
STATE: IL
COUNTRY: USA
ZIP: 60606

COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: PatentIn Release #1.0, Version #1.25

CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/481,534
FILING DATE: 14-SEP-1995
CLASSIFICATION: 530
ATTORNEY/AGENT INFORMATION:
NAME: No. 6022855nan, Kevin E
REGISTRATION NUMBER: 35,303
REFERENCE/DOCKET NUMBER: 92,448 D
TELECOMMUNICATION INFORMATION:
TELEPHONE: 312-913-0001

TELEX: 312-913-0001

REFERENCE/DOCKET NUMBER: 92,448
 TELEPHONE: 312-715-1000
 TELEFAX: 312-715-1234
 TELEX: 910-221-5317
 INFORMATION FOR SEQ ID NO: 9:
 SEQUENCE CHARACTERISTICS:
 LENGTH: 394 amino acids
 TYPE: amino acid
 TOPOLOGY: linear
 FEATURE:
 NAME/KEY: Protein
 OTHER INFORMATION: /label= Variant
 OTHER INFORMATION: /note= "This amino acid sequence is the amino acid sequence of the modified alpha-1-antitrypsin protein, alpha-1-antitrypsin Portland;"
 US-08-002-202-9

Query Match 75.3%; Score: 2013; DB: 1; Length: 394;
 Best Local Similarity 99.0%; Pred. No. 5.9e-16;
 Matches 390; Conservative 2; Mismatches 2; Indels 0; Gaps 0;

Qy 110 EDPGDAAQKTDTSHHDDHPTENKTPNLAFAFSYRLAHOQNNTNIFSPVSIATA 169
 Db 1 EDPGDAAQKTDTSHHDDHPTENKTPNLAFAFSYRLAHOQNNTNIFSPVSIATA 60

Qy 170 FAMSLGLTKADTHDEILEGFLNLNFNLTEPEAQTHEGFOELRLTRLNQPDSQLQTGNGLFL 229
 Db 61 FAMSLGLTKADTHDEILEGFLNLNFNLTEPEAQTHEGFOELRLTRLNQPDSQLQTGNGLFL 120

Qy 230 SEGLKLVDKFLEDVKLYHSEAFVNGDTDEFAKQINDYVEKGKIVDVLVKELDRD 289
 Db 121 SQGLKLVDKFLEDVKLYHSEAFVNGDTDEAKQINDYVEKGKIVDVLVKELDRD 180

Qy 290 VEALVNYYEFKGWERPPEVKDTEEDFH DQVTTVKVPMKRLGMENIQCKKKLSSWL 349
 Db 181 VEALVNYYEFKGWERPPEVKDTEEDFH DQVTTVKVPMKRLGMENIQCKKKLSSWL 240

Qy 350 LMKYLGNAATIPLPDEKLQLHLENETHDTIKFLENEDRSASLHLPKSISITGYDLK 409
 Db 241 LMKYLGNAATIPLPDEKLQLHLENETHDTIKFLENEDRSASLHLPKSISITGYDLK 300

Qy 410 SVLQLGITKVFSNGADLSGVTEEAPLKLSKAVHKAVLTDEKGTAAGAMLEAPIMSI 469
 Db 301 SVLQLGITKVFSNGADLSGVTEEAPLKLSKAVHKAVLTDEKGTEAAGMLEPIRSI 360

Qy 470 PPEVKENPKPFVLFMIEQNTKSPLFMGKVNPQTQ 503
 Db 361 PPEVKENPKPFVLFMIEQNTKSPLFMGKVNPQTQ 394

RESULT 11
 US-08-002-202-17
 Sequence 17, Application US/08002202
 Patent No. 5604101
 GENERAL INFORMATION:
 APPLICANT: Thomas, Garry D
 APPLICANT: Anderson, Eric D
 APPLICANT: Thomas, Laurel
 APPLICANT: Haylick, Joe S
 TITLE OF INVENTION: Methods and Reagents for Inhibiting
 TITLE OF INVENTION: Furin Endopeptidase
 NUMBER OF SEQUENCES: 21
 CORRESPONDENCE ADDRESS:
 ADDRESSEE: Allegretti and Witcoff, Ltd.
 STREET: 10 South Wacker Drive, Suite 3000
 CITY: Chicago
 STATE: Illinois
 COUNTRY: USA
 ZIP: 60606
 COMPUTER READABLE FORM:

RESULT 12
 US-08-481-534-17
 Sequence 17, Application US/08481534
 Patent No. 602855
 GENERAL INFORMATION:
 APPLICANT: Thomas, Gary D
 APPLICANT: Anderson, Eric D
 APPLICANT: Thomas, Laurel
 APPLICANT: Haylick, Joe S
 APPLICANT: Nelson, Jay
 APPLICANT: Stenglein, Stephan G
 TITLE OF INVENTION: Methods and Reagents for Inhibiting Furin
 TITLE OF INVENTION: Endopeptidase
 NUMBER OF SEQUENCES: 21
 CORRESPONDENCE ADDRESS:
 ADDRESSEE: McDonnell Boehnen Hulbert & Berghoff

STREET: 300 South Wacker Drive
 CITY: Chicago
 STATE: IL
 COUNTRY: USA
 ZIP: 60606
 COMPUTER READABLE FORM:
 MEDIUM TYPE: Floppy disk
 COMPUTER: IBM PC compatible
 OPERATING SYSTEM: PC-DOS/MS-DOS
 SOFTWARE: Patentn Release #1.0, Version #1.25
 CURRENT APPLICATION DATA:
 APPLICATION NUMBER: US/08/481,534
 FILING DATE: 14-SEP-1995
 CLASSIFICATION: 530
 ATTORNEY/AGENT INFORMATION:
 NAME: No. 60285man, Kevin E
 REGISTRATION NUMBER: 35,303
 REFERENCE/DOCKET NUMBER: 92,448-D
 TELECOMMUNICATION INFORMATION:
 TELEPHONE: 312-913-0001
 TELEX: 312-913-0002
 FAX: 312-913-0002
 INFORMATION FOR SEQ ID NO: 17:
 SEQUENCE CHARACTERISTICS:
 LENGTH: 414 amino acids
 TYPE: amino acid
 TOPOLOGY: linear
 MOLECULE TYPE: Protein
 US-08-481-534-17

Query Match 75.2%; Score 2010.5; DB 3; Length 414;
 Best Local Similarity 96.3%; Pred. No. 1e-163; Gaps 2;
 Matches 393; Conservative 3; N mismatches 5; Indels 7; Gaps 2;

Qy 96 GMCGKSCVSPVKAMEDPGQDAQKTDTSHHQDQHPTFNKITPNAEAFSLYRQLAHSN 155
 Db 14 GLC--CLVPVSLAEDPGQDAQKTDTSHHQDQHPTFNKITPNAEAFSLYRQLAHSN 70
 Qy 156 STNIFSPVSATAPAMSLGSLTAKDTHDELEGIFNLTEPEAQIHSGEFQELLRTLNQP 215
 Db 71 STNIFSPVSATAPAMLSGGTAKDTHDELEGIFNLTEPEFQIHSGEFQELLRTLN- 128
 Qy 216 DSQQLQTGNGOLFSEGKLVDKFLEDYKKLHSEAFTYNFGDTEAKQINDYVERKTQ 275
 Db 129 -QLQTGNGOLFSEGKLVDKFLEDYKKLHSEAFTYNFGDTEAKQINDYVERKTQ 186
 Qy 276 GKIVDKLVKEELDRDTFVALVNYIFFKGKWERPFEVKDTEEDFHVDQVTIVKPYMMKRLGM 335
 Db 187 GKIVDKLVKEELDRDTFVALVNYIFFKGKWERPFEVKDTEEDFHVDQVTIVKPYMMKRLGM 246
 Qy 336 ENIQHQKKLSSWVLLMKLYGNATAFLFLDEGKLOHLENELTHDLITKELENDRRSASL 395
 Db 247 ENIQHQKKLSSWVLLMKLYGNATAFLFLDEGKLOHLENELTHDLITKELENDRRSASL 306
 Qy 396 HLPKLSITGTYDLKSYLGQGLITKVFSNGADSGVTEAFLPKLSKAVHKAVLTIDEKGT 455
 Db 307 HLPKLSITGTYDLKSYLGQGLITKVFSNGADSGVTEAFLPKLSKAVHKAVLTIDEKGT 366
 Qy 456 AGAMFLEATPMSIPPEVKENKPFPFLMEQNTKSPLFMGKVNNTQK 503
 Db 367 AGAMFLEATPMSIPPEVKENKPFPFLMTEQNTKSPLFMGKVNNTQK 414

RESULT 13
 US-08-481-534-11
 ; Sequence 11, Application US/08481534
 ; General Information:
 ; Applicant: Thomas, Gary D
 ; Applicant: Anderson, Eric D
 ; Applicant: Thomas, Laurel S
 ; Applicant: Haylick, Joel S
 ; Applicant: Nelson, Jay

RESULT 14
US -08-202-13
; Sequence 13, Application US/08002202
; Patent No. 5604201

GENERAL INFORMATION:
; APPLICANT: Thomas, Garry D
; APPLICANT: Anderson, Eric D
; APPLICANT: Thomas, Laurel S
; APPLICANT: Hayflick, Joel S
; TITLE OF INVENTION: Methods and Reagents for Inhibiting Furin Endoprotease
; NUMBER OF SEQUENCES: 21
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Allegretti and Witcoff, Ltd.
; STREET: 10 South Wacker Drive, Suite 3000
; CITY: Chicago
; STATE: Illinois
; COUNTRY: USA
; ZIP: 60606

COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: PatentIn Release #1.0, Version #1.25

CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/08/002,202
; FILING DATE: 08-JAN-1993
; CLASSIFICATION: 514
; ATTORNEY/AGENT INFORMATION:
; NAME: No. 5604201an, Kevin E
; REGISTRATION NUMBER: 35,30003
; REFERENCE/DOCKET NUMBER: 94,448
; TELEPHONE: 312-715-1000
; TELEFAX: 910-221-5317
; INFORMATION FOR SEQ ID NO: 13:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 414 amino acids
; TYPE: amino acid
; TOPOLOGY: linear
; MOLECULE TYPE: protein

US-08-002-202-13

Query Match Score 2004.5; DB 1; Length 414;
Best Local Similarity 96.1%; Pred. No. 3.4e-163;
Matches 392; Conservative 3; Mismatches 6; Gaps 2;

Qy 96 GMCGKSCVSPYKAMDPGQAOKTDTSHDQDIPFTNTTPNIAEAFSFLYRQLAHQN 155
Db 14 GLC--CLVPVSLAEDPGQAOKTDTSHDQDAPTFNTTPNIAEAFSFLYRQLAHQN 70
Qy 156 STNIFSPVSTATAFAMLSLGTKADETHDELEGNFLNLTPEQIHEGQFELLRLTQNQ 215
Db 71 STNIFSPVSTATAFAMLSLGTKADETHDELEGNFLNLTPEQIHEGQFELLRLTQNQ
Qy 216 DSOLQLTTGNGLFSEGKLVDKFLEDVKLYHSEAFYVNGDPEAKQINDYVERGTQ 275
Db 129 -QQLQT-TGNGLFSEGKLVDKFLEDVKLYHSEAFYVNGDPEAKQINDYVERGTQ 186
Qy 276 GKVDLVKEJDRTDVFAINYIFFRGKWRPFEYKDTDEDFHVQTYTVPMMKRIGM 335
Db 187 GKVDLVKEJDRTDVFAINYIFFRGKWRPFEYKDTDEDFHVQTYTVPMMKRIGM 246
Qy 336 FNIQHKCKLSSWLLMKYLNATATEFLPDEGKQLHLENELTHDITKFLENEDRRSASL 395
Db 247 FNIQHKCKLSSWLLMKYLNATAMEFLPDEGKQLHLENELTHDITKFLENEDRRSASL 306
Qy 396 HLPKLSITGTYDLKSVLGQGITKVFSNAGLSCVTERAPLKSKAVKAVLTIDEKGTE 455

Db 307 HLPKLSITGTYDLKSVLGQGITKVFSNAGLSCVTERAPLKSKAVKAVLTIDEKGTE 366
Qy 456 AAGAMFLAEAPMSIPPEVKENKPPFVLMIEQNTKSPLEMKGKVVNPTQK 503
Db 367 AAGAMFLAEAPRSIPPEVKENKPPFVLMIEQNTKSPLEMKGKVVNPTQK 414

RESULT 15
US-08-481-534-13
; Sequence 13, Application US/08481534
; Patent No. 6022855
; GENERAL INFORMATION:
; APPLICANT: Thomas, Gary D
; APPLICANT: Anderson, Eric D
; APPLICANT: Thomas, Laurel S
; APPLICANT: Hayflick, Joel S
; APPLICANT: Nelson, Jay
; APPLICANT: Stenglein, Stephan G
; TITLE OF INVENTION: Methods and Reagents for Inhibiting Furin
; NUMBER OF SEQUENCES: 21
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: McDonnell Boehnen Hulbert & Berghoff
; STREET: 300 South Wacker Drive
; CITY: Chicago
; STATE: IL
; COUNTRY: USA
; ZIP: 60606
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: PatentIn Release #1.0, Version #1.25
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/08/481,534
; FILING DATE: 14-SEP-1995
; CLASSIFICATION: 530
; ATTORNEY/AGENT INFORMATION:
; NAME: No. 6022855an, Kevin E
; REGISTRATION NUMBER: 35,303
; REFERENCE/DOCKET NUMBER: 92,448-D
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: 312-913-0001
; TELEX: 312-913-0002
; TELEX:
; INFORMATION FOR SEQ ID NO: 13:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 414 amino acids
; TYPE: amino acid
; TOPOLOGY: linear
; MOLECULE TYPE: protein

US-08-481-534-13

SEQUENCE CHARACTERISTICS:
; LENGTH: 414 amino acids
; TYPE: amino acid
; TOPOLOGY: linear
; MOLECULE TYPE: protein

US-08-481-534-13

Query Match Score 2004.5; DB 3; Length 414;
Best Local Similarity 96.1%; Pred. No. 3.4e-163;
Matches 392; Conservative 3; Mismatches 6; Gaps 2;

Qy 96 GMCGKSCVSPYKAMDPGQAOKTDTSHDQDIPFTNTTPNIAEAFSFLYRQLAHQN 155
Db 14 GLC--CLVPVSLAEDPGQAOKTDTSHDQDAPTFNTTPNIAEAFSFLYRQLAHQN 70
Qy 156 STNIFSPVSTATAFAMLSLGTKADETHDELEGNFLNLTPEQIHEGQFELLRLTQNQ 215
Db 71 STNIFSPVSTATAFAMLSLGTKADETHDELEGNFLNLTPEQIHEGQFELLRLTQNQ
Qy 216 DSOLQLTTGNGLFSEGKLVDKFLEDVKLYHSEAFYVNGDPEAKQINDYVERGTQ 275
Db 129 -QQLQT-TGNGLFSEGKLVDKFLEDVKLYHSEAFYVNGDPEAKQINDYVERGTQ 186
Qy 276 GKVDLVKEJDRTDVFAINYIFFRGKWRPFEYKDTDEDFHVQTYTVPMMKRIGM 335
Db 187 GKVDLVKEJDRTDVFAINYIFFRGKWRPFEYKDTDEDFHVQTYTVPMMKRIGM 246
Qy 336 FNIQHKCKLSSWLLMKYLNATATEFLPDEGKQLHLENELTHDITKFLENEDRRSASL 395
Db 247 FNIQHKCKLSSWLLMKYLNATAMEFLPDEGKQLHLENELTHDITKFLENEDRRSASL 306
Qy 396 HLPKLSITGTYDLKSVLGQGITKVFSNAGLSCVTERAPLKSKAVKAVLTIDEKGTE 455

Db 307 HLPKLSITGTYDLKSVLGQGITKVFSNAGLSCVTERAPLKSKAVKAVLTIDEKGTE 366
Qy 456 AAGAMFLAEAPMSIPPEVKENKPPFVLMIEQNTKSPLEMKGKVVNPTQK 503
Db 367 AAGAMFLAEAPRSIPPEVKENKPPFVLMIEQNTKSPLEMKGKVVNPTQK 414

Db 307 HLPKLSITGTYDLKSVLGQGITKVFSNAGLSCVTERAPLKSKAVKAVLTIDEKGTE 366
Qy 456 AAGAMFLAEAPMSIPPEVKENKPPFVLMIEQNTKSPLEMKGKVVNPTQK 503
Db 367 AAGAMFLAEAPRSIPPEVKENKPPFVLMIEQNTKSPLEMKGKVVNPTQK 414

Qy	336	FNIQHCKKLSSWILLMKTYLGNATAIFFLPDEGKQHLNELTHDITTKFLENEDRSASL	395
Db	247	FNIQHCKKLSSWILLMKTYLGNATAAMFFLDEGLQHLNELTHDITTKFLENEDRSASL	306
Qy	396	HLPKLSITGTYDKSVLGQLGITKVFSNGADLSGVTEAPLKLASKAVHKAVLTIDERGTE	455
Db	307	HLPKLSITGTYDKSVLGQLGITKVFSNGADLSGVTEAPLKLASKAVHKAVLTIDERGTE	366
Qy	456	AAGAMFLEATPMSIPPEVKFNKPFVFLMIEQNTKSPLFMGKVVNPTOK	503
Db	367	AAGAMFLEATPSPPEVKFNKPFVFLMIEQNTKSPLFMGKVVNPTOK	414

search completed: November 30, 2002, 12:38:12
job time : 12.5 secs